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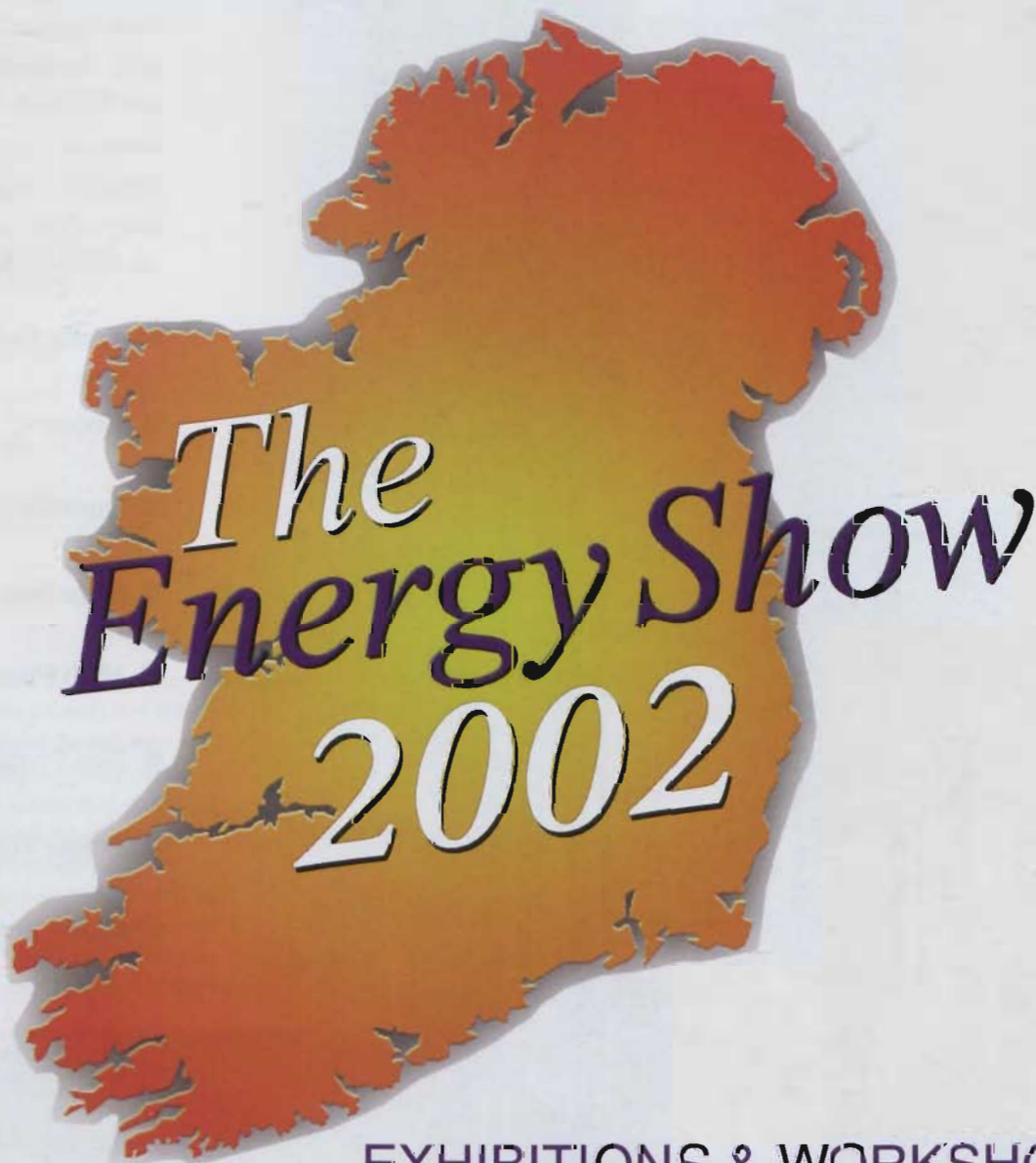
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BSN News

et al.: BS News

NOVEMBER 2001

MECHANICAL & ELECTRICAL BUILDING SERVICES



EXHIBITIONS & WORKSHOPS

- ☐ Tony Harmon Services Ltd – 8-page profile
- ☐ Leak Detection & Alarm Services
- ☐ Underfloor Heating
- ☐ Packaged Plant Room Solutions

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BSNews

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BUILDING SERVICES

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Irish Building Services News (formerly Irish H&V News) is Ireland's only Building Services magazine providing coverage of heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing, maintenance and environmental industries. It is the only publication catering exclusively for these industries and its circulation includes members of the following:-

Chartered Institution of Building Services Engineers (CIBSE); The Mechanical Engineering & Building Services Contractors' Association (MEBSA); The Association of Consulting Engineers of Ireland (ACEI); The Mechanical Engineering Contractors' Association; The Institute of Domestic Heating Engineers (IDHE); The Registered Heating Contractors Association; The Maintenance, Energy & Environmental Technology Association (MEETA) which incorporates energy managers and maintenance managers; The Energy Conservation & District Heating Association; The Institute of Plumbing; The Irish Home Builders Association (IHBA); Builders Merchants/Trade Supply Outlets; Irish Property & Facilities Managers Association.

In addition, Irish Building Services News circulates to independent building services contractors and key executives in industry. Government, Semi-State and local authority bodies. Essentially, our circulation is virtually saturation coverage of all those with an interest and/or involvement in the industry.

Yes ... There is plenty of good News!

In recent weeks the emphasis across all media — be it print, radio or TV — is to focus on the bad news story ... it's almost as if they are vying with one another to see who can conjure up the worst possible scenario. Of course there is a downturn and yes, even the building services sector has seen its first major collapse in Thermo Systems Ltd (see page 4).

But there is also plenty of good news out there. Companies are continuing to expand and develop, to invest in new products, and to make plans for the future. For instance, Daikan and Trane are looking to formalise a strategic global alliance; Cylon has introduced yet another innovative control device; 3D Air Sales has unveiled the MHI inverter-multi VRF systems; details of the forthcoming Energy Show 2002 have been announced; Thermo Air has launched its 2002 technical brochure; while Ventac has produced a dedicated CD catalogue on the extensive Klima air conditioning range.

Also inside are details of Trane's Best Kept Secret; Polytherm Heating Systems; Wirsbo-Pex Pipes; Danfoss Wire-Free Control for Underfloor Heating; Wilo Stratos High-Efficiency Pumps; Andel Leak Detection Systems from Manotherm; Packaged Plant Room Solutions from Euro Gas Pak Plant; and details of the latest BTU outings.

However, perhaps best illustrating the strength and confidence of the industry in this issue is the 8-page full-colour feature on Tony Harmon Services Ltd. In celebrating 21 years in business Tony and his colleagues are also looking forward to further growth and development.

So, let's not dwell too long on the bad new stories ...

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Daikin and Trane Form Global Alliance

Daikin's Air Conditioning Division and Trane, American Standards Air Conditioning division, have agreed to form a comprehensive global strategic alliance to source and sell each other's products.

Building on each other's product, brand, geographic and distribution strengths, the alliance will enable Daikin and Trane to increase their market opportunities in eight major regions around the world, serving their respective customers with broader product offerings while minimising costs and risk. Each company will focus on its own areas of expertise and capitalise on the other's complementary capabilities. Through the alliance, the companies will provide their own customers with a complete line of heating, ventilation and air conditioning (HVAC) products, services and solutions for industrial, commercial and residential markets.

Daikin, with annual sales of 531.9 billion YEN/US\$4.4. billion, is a Japanese air conditioning leader and has strong global market positions in ductless residential and commercial air conditioners as well as small chillers. Trane, with annual sales of about US\$4.7 billion/572 Yen, is a global leader in commercial air conditioning systems and is a leader in commercial and ducted residential air conditioning in the United States.

As part of the alliance, Daikin will contribute its development and manufacturing expertise in ductless residential and commercial products, as well as in dealer and installer distribution channels outside its home market. Outside the US, Trane will contribute its development and manufacturing expertise in applied and ducted unitary systems, in addition to its experience selling through commercial channels, including consulting engineers, contractors and building owners.

The companies will implement this long-term strategic alliance when they develop a series of agreements for Japan, Europe, North and South America, Asia Pacific, the Middle East, Africa, India and China. Next year, Daikin and Trane plan to start a cross-sourcing arrangement in Europe, which will be followed by other country specific agreements over time.

New MD at BPB Gypsum Industries

BPB Gypsum Industries Ltd, has appointed Kieran Miller as Managing Director. He was Operations Director since 1995, having previously held the position of general manager.

Mr Miller also becomes Managing Director of Moy-Isover Ltd (Ardfinnan), a joint venture between BPB plc and St-Gobain and of BPB Rawplug Ireland Ltd (Dublin), which was



Kieran Miller, managing Director, BPB Gypsum Industries Ltd acquired by Gypsum Industries earlier this year.

BPB Gypsum Industries Ltd has a major manufacturing and mining operations based at Kingscourt, Co Cavan and a warehousing/distribution facility in Dublin. The company also markets Artex and the Blue Hawk range of DIY products.

Cylon UCKRA 420 Keypad

The UCKRA 420 serial keypad recently brought to market by Cylon Controls has been well received by approved installers of Cylon Building Management Systems and many customers. Fully programmable, this keypad gives local user interface up to 50 meters from the controller(s), and full BMS alarm support.

Variants of Cylon's UCC4 communication controllers and all UCxx PG-R plant controllers support this serial keypad which attaches to the controller by way of an RJ11 connector (or common telephone type connector). Three password levels of user access provide for the execution of menu-driven programmes stored in the controller(s) to users of varying expertise or none.

Power is received from the associated controller and the UCKRA serial keypad is hot-pluggable, i.e. it can be connected to a powered-up controller. The UCKRA420 may be mounted in a panel door, on a panel back-plate or on a pattress box on the wall.



Communication is via RS232 @ 9600 Baud. Screened cable is advised on runs of 5 to 50 meters to this keypad, and screw terminals are included for this purpose. The display allows for 80 alpha-numeric characters arranged as four lines x 20 characters. Two chosen variables remain on constant display, such as room temperature and humidity.

This Cylon product has been designed to meet CENELEC EMI noise standard EN 50-082-1.

Contact: John O'Driscoll, Cylon Controls. Tel: 01 - 245 0500; www.cylon-controls.com.

Chartered Engineer of the Year

Pictured with his Waterford Crystal trophy, certificate and cheque for £2,000 is Fergal Lalor, winner of the Parc-sponsored Institution of Engineers of Ireland Chartered Engineer of the Year award.

Fergal won for his work as Project Director of the £266 million Iarnrod Éireann (Irish Rail) Kildare Route. Also pictured is Anne-Marie Murphy, General Manager of Parc's Engineering & Technology Division and IEI President Liam Connellan.



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MHI Inverter-multi VRF Systems

The 2-pipe (KX) and 3-pipe (KXR) systems manufactured by Mitsubishi Heavy Industries have all the technical advantages of variable capacity, operating efficiency and state-of-the-art variable capacity control at each terminal unit, as well as variable speed compressors.

The KXR systems also have energy recovery, i.e. taking unwanted heat from areas requiring cooling, and utilising this heat energy in parts of the building which require heating. It is ideal where the building has a mixed requirement, eg. north and south sides of a glass fronted building, or a retail store, where concentrations of customers or lighting levels would dictate a combination of simultaneous cooling and heating in different areas.

The indoor unit temperature sensors constantly monitor the room condition, and provide the correct amount of cooling or heating to maintain the temperature at the desired

condition. The refrigerant flow in each indoor unit is controlled by an electronic linear expansion valve, the opening of which is dependant on the differential between the set temperature and the actual temperature. The combination of the pulse signals to each indoor unit LEV is relayed back to the outdoor unit, which then delivers the required amount of liquid refrigerant, or hot gas refrigerant, to each of the indoor units. The system is constantly monitored through the 'fuzzy logic' control system, ensuring that the complete system performs to its optimum level, in order to minimise electricity consumption.

The configuration of the KXR system is different from other manufacturer's systems, in that the connection from the 3-pipe loop to the indoor units is through single, 2-way, 4-way or 6-way refrigerant distribution controllers. These controllers can be mounted in the ceiling, or concealed in some

convenient location. They are completely sealed and insulated, and therefore do not require any condensate drain. Where several units are located in close proximity, the 4-way and 6-way controllers can be installed, greatly reducing the number of brazed pipe joints, whilst providing independent cooling or heating at each of the connected room units.

The latest KXR outdoor units, which are available for R407C, can be connected to 16 indoor units maximum. This provides very flexible application possibilities for small cellular offices or hotel bedrooms.

Mitsubishi Heavy Industries has just launched a new compact single discharge cassette, the FDQM, suitable for installation in a 600 x 600mm ceiling grid opening. This compact unit has an attractive white fascia panel, compatible with most modern internal colour schemes. The FDQM includes a condensate lift pump, and can also be installed as a ducted unit in a bulkhead application. The multi function remote controller also includes a temperature sensor, which can be used as an

alternative to the return air sensor, particularly useful for ducted units.

The 3D web site includes extensive information on equipment specifications, installation details, engineering drawings, drawing icons for AutoCad programmes, plus useful tips and advice for selection and application of all MHI split systems and VRF systems.

Contact: Michael Clancy of 3D Air Sales (Ireland) Ltd.
Tel: 01-450 9433

www.interclima.com

Interclima 2002, the international HVAC-R exhibition, will be held at Paris expo - Porte de Versailles from 5 to 9 February next year in conjunction with Ideo Bain, the Bathroom Show. Taking part in such a trade event,

whether as an exhibitor or a visitor, requires a great deal of preparation and therefore Reed Expositions France - the organiser - is offering a suite of vital online tools on the www.interclima.com web site designed to help participants make the most of the show.

Future participants in the show will find the site an effective means of preparing for it in advance, and a source of rapid answers to any questions that might arise as they plan their trip.

Visitors may pre-register via the site and order a free entry badge to be sent to them in advance. They can also order a show catalogue to help in their preparations for the show. www.interclima.com will also show exhibitors and visitors how to get to the show, details of transport and accommodation solutions, and a practical guide to the capital.

Thermo Systems Ltd £1.37 Million Deficit

While there was much talk within the industry prior to the creditors meeting of Thermo Systems Ltd in Buswells Hotel on 14 November last, the final deficit figure of £1.37 million took most observers by surprise. Coming out of what is acknowledged as the best and most sustained trading period ever experienced by the construction sector in this country, it is hard to understand how things could go so horribly wrong.

At the end of the creditors meeting the 30 plus present were still somewhat in the dark. The questions put to the company's principal director resulted in no real insight into the cause of the demise and, if anything, there was an air of resignation in the room ... it was as if people were there simply to go through the motions.

The directors estimated Statement of Affairs as at 14 November 2001 makes for some very interesting reading, the amounts owed to preferential and unsecured creditors varying from the low hundreds right up to hundreds of thousands of pounds. It is obvious from the figures that some of those involved will find it very difficult to carry the loss and may in turn find themselves in difficulties. But such is the inevitable domino effect of situations such as this.

Tom Kavanagh of Kavanagh chartered accountants was appointed liquidator and those with queries in relation to the matter can contact Julian Moroney at Tel: 01 - 668 0288.

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Climate Change The New Business Challenge

The ever-widening scope of the Energy Show – RDS Industries Hall, 15/16 May 2002 – now also embraces an increasing number of renewable energy technologies.

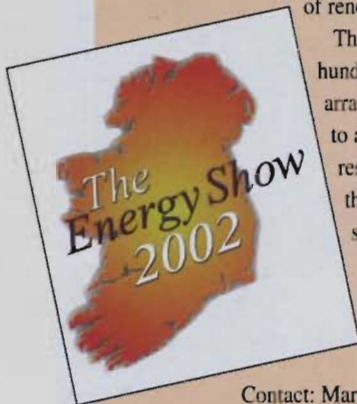
The Energy Show brings together hundreds of exhibitors who present a vast array of innovative products and services to all those with an interest in, and responsibility for, energy usage across the domestic, commercial and industrial sectors.

Put simply, The Energy Show is about making sustainable energy pay.

BSNews will have a full preview in its next issue.

Contact: Margaret Andreucetti, Business

Exhibitions. Tel: 01-295 7418



Thermo Air 2002 Technical Brochure

Following another successful year with sales in Ireland and Europe, the Thermo Air group plans to support its sales in 2002 with the issue of a new technical summary brochure.

While mindful of the economic trends which may prevail in the new year, the Irish side of this Dutch organisation is optimistic that the close and stable technical support it offers its clients, combined with its wide product portfolio, positions the company excellently for whatever the future may bring.

At a manufacturing level, new products in development include the bringing on line of the company's so-called "Intelligent" fan range, the DDEC line. This line offers a constant volume feature where the fan's internal programme varies the speed and torque to meet actual volume requirements. The product has applications in all areas where variations in pressure development occur and where a constant volume of air is

required eg filtered air supplies to critical areas etc.

Other product developments include the refinement of the company's products for the treatment of polluted air and the provision of so-called, Elan range of competitively-priced, stand-alone extraction / ventilation cabinets. At an air-handling unit level, the company has up-graded the range of its finishes and options, in addition to an extensive range of control packages.

"As always", says Jack Dempsey, "Thermo Air continues to offer its full range of Spaceheaters, both oil and gas fired. Unit heaters / blowers of all shapes and outputs are a speciality. At this time of the year its range of high-output, over-door, air curtain heaters are in high demand. A major element of the Thermo Air success story comes from its ability to provide product on short lead times. Customers at all levels can be assured that the company carries substantial stocks of components and finished products at its 110,000 sq ft premises in Carlow."

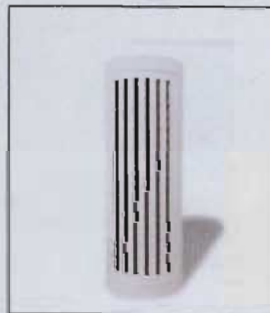
Contact: Jack Dempsey, Thermo Air Irl.
Tel: 0503-31646.
email: jack@thermoair.com

Klima AC Systems from Ventac

Full details on the extensive range of Klima air conditioning systems from Ventac are now available on a new CD. Among the products contained in the range are those featured below.

Contact: Ciaran King, Ventac.

Tel: 667 1077. Email: info@ventac.com



SKD duct diffuser



SP supply air / exhaust air tower



VS fixed / adjustable nozzle



OD variable swirl diffuser

Cork Institute Prize Giving

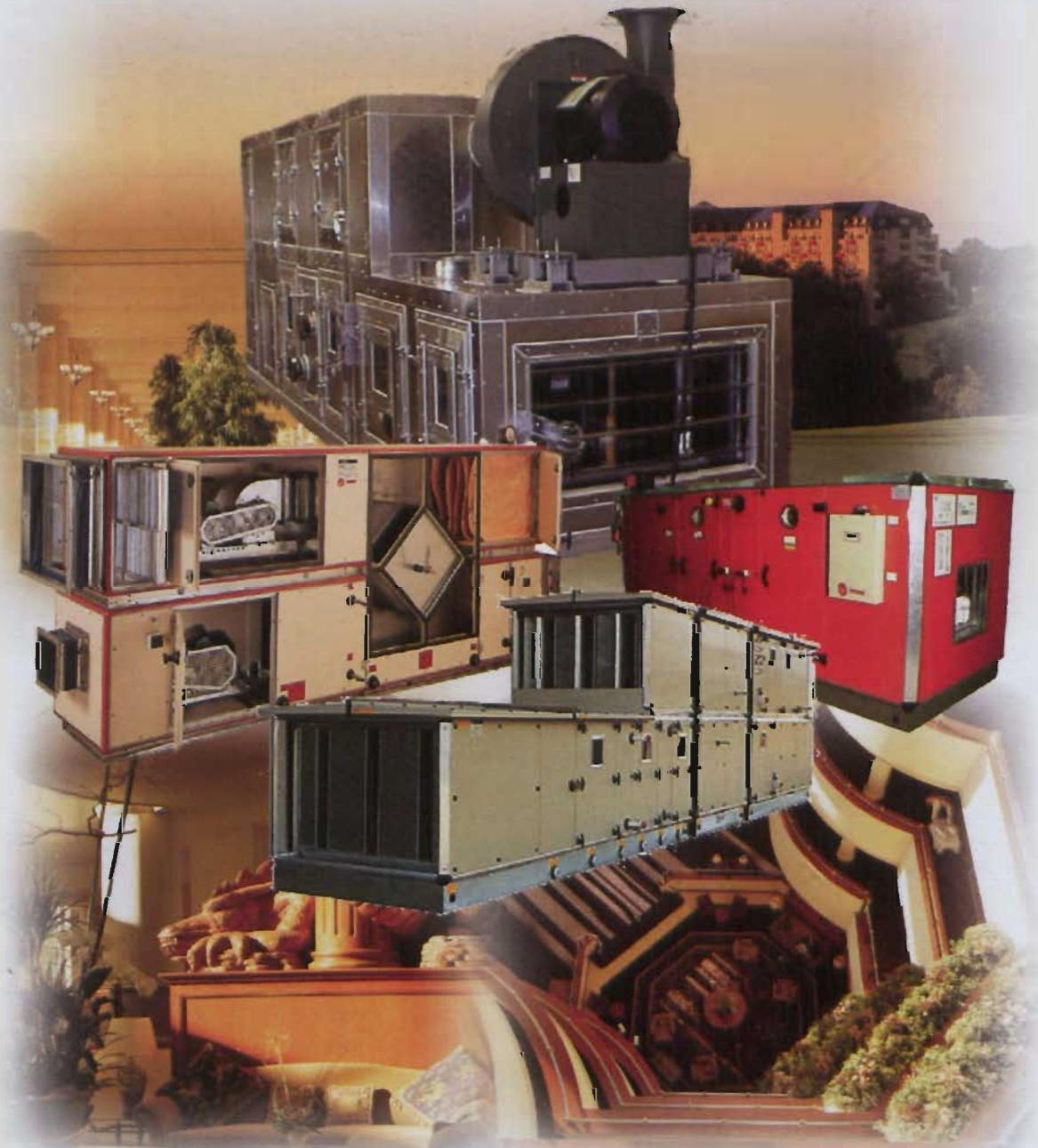


CIT Building & Civil Engineering student Paul Whelan-Curtin from Mogelly, Co Cork, receiving his award from Joe O'Brien of the construction Industry Federation at the Cork Institute of Technology Prizegiving. Also pictured are Liam Hodnett, (L) Head of Department; Dr Patrick Kelleher, Director CIT; and Cllr Donal O'Rourke, Chairman of the Governing Body.



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Targeting the Self-Build Sector

Approximately 50% of all homes built in Ireland today are "self-build", a figure that is expected to continue to rise significantly in the coming years.

Consequently, the forthcoming New House Interiors & Garden Show — RDS Simmonscourt, 15/18 March 2002 — will have a dedicated section devoted entirely to the self-build sector.

In addition to a programme of interactive workshops and seminars, "Self-Build Avenue" will act as a central feature of the show. According to Garret Buckley, Joint Managing Director of Expo Exhibitions, the organisers, this section will comprise five specially-constructed, two-storey arches. Strategically positioned down through the central aisle of the exhibition, they will act as a primary source of practical advice and information for visitors to the show.

Each of the five structures will be designed to highlight the different issues for consideration at various stages of the building process, from the overall structure to roofing, insulation, heating, plumbing, etc. It is hoped that these two-storey structures will

provide self-builders with practical examples of the wide range of options available to them, whether it is the correct depth of insulation they should be laying, or the best methods available to help conserve energy and heat in the home. An extensive programme of seminars and interactive workshops has been devised to address a wide range of issues of importance to those considering the self-build option.

"Consumer education and confidence is extremely important for the future of self-build in Ireland", says Garret Buckley. "Among the many topics that will be addressed in this competitive programme will be — managing the building project and maximising relationships with sub-contractors; insulation (including sound insulation) and energy efficiency; restoration/conservation; safety in the home; timber-frame housing; planning/building regulations; insurance; and interior design". Contact: Garret Buckley, Expo Exhibitions. Tel: 01 - 295 8181. email: info@expo-events.com Website: www.expo-events.com

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The packaged plant room concept is now firmly established and is widely seen by many in building services as the preferred method of construction. Euro Gas Pak plant is at the forefront of packaged plant room services module design and construction technology. It builds modules fitted and finished exactly to specific requirements, as well as supplying standard off-the-shelf boilerhouses suitable for many applications.

Apart from the efficiency and performance benefits, the packaged plant room solution has a direct affect on the bottom line.

Simply applying the efficiency of a parallel building construction programme can yield a significant cost saving.

Weather conditions have no impact on the Pakplant assembly programme thus, providing firm and secure completion dates. Damage by associated trades to equipment on site does not occur. The plant arrives pre-tested at the appropriate time in the building schedule.

Commissioning is fast.

There is less need to keep senior craftsmen on site to complete the boilerhouse as all this complex work is done by Pak Plant off site. Project insurance

costs can be reduced as less site staff means less accidents. This can yield a significant cost saving to the contractor. Overall, a Pakplant solution can be between 10% and 30% less expensive than the equivalent blocks, mortar and site assembly of plant.

The packaged plant room is also ideal for refurbishment. Replacing obsolete H&V plant, meeting new standards and other major plant replacement projects are ideal for a Pakplant solution.

Pakplant can be used to supplement existing plant too. For instance, increasing hot water storage and generation, or extra heating capacity, can be accomplished easily.

Euro Gas Pak Plant Ltd offers solutions to all manner of problems experienced by project managers on sites by providing either standard units or custom designed complete packaged plant rooms.

All these units are designed and built in Ireland and can be supplied as skid-mounted units to allow incorporation into existing building structures if preferred.

Euro Gas Pak Plant Ltd has just completed a contract for the supply of a packaged boilerhouse for the Burgh Quay Office Development Project in Dublin City Centre. This packaged unit

was designed in conjunction with the consulting engineers VMRA, under the leadership of Jim Rogers and was supplied through the mechanical contractors T Bourke & Company Ltd.

The unit contains three Rendamax high-efficiency, fully-modulating boilers giving a total load of 690 kW and due to the strict planning restrictions had to be no more than 1600 mm high. This was achieved through innovative use of plant space and the use of independent fan-flued dilution systems for each boiler. The advantages for the consultant included that it logistically made significant reductions to the programme time because, once the roof was completed, the boilerhouse could be craned into position.

Other projects completed include James Connolly Memorial Hospital Nurses Accommodation and James Connolly Temporary Accommodation; Tesco Sligo and Sandymount; Department of Education, Athlone; McDonalds, Cork, Carlow, Crumlin, Cavan, Lucan and Kilkenny; and IFSC Welcome Centre.

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- ☐ Packaged un-interruptible computer power systems;
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- ☐ A range of cold water supply tank rooms and fire sprinkler pump houses

For further information contact: Martin Garvey, Euro Gas Pak Plant.
Tel: 01 - 286 8244



A typical Rendamax package plant room assembly from Euro Gas Pak Plant Ltd.

KXR-16

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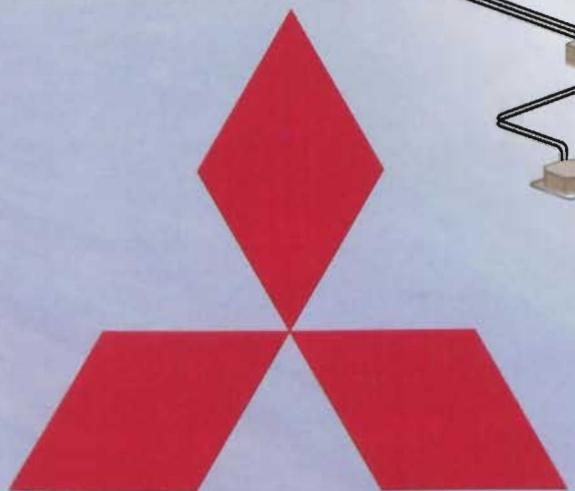
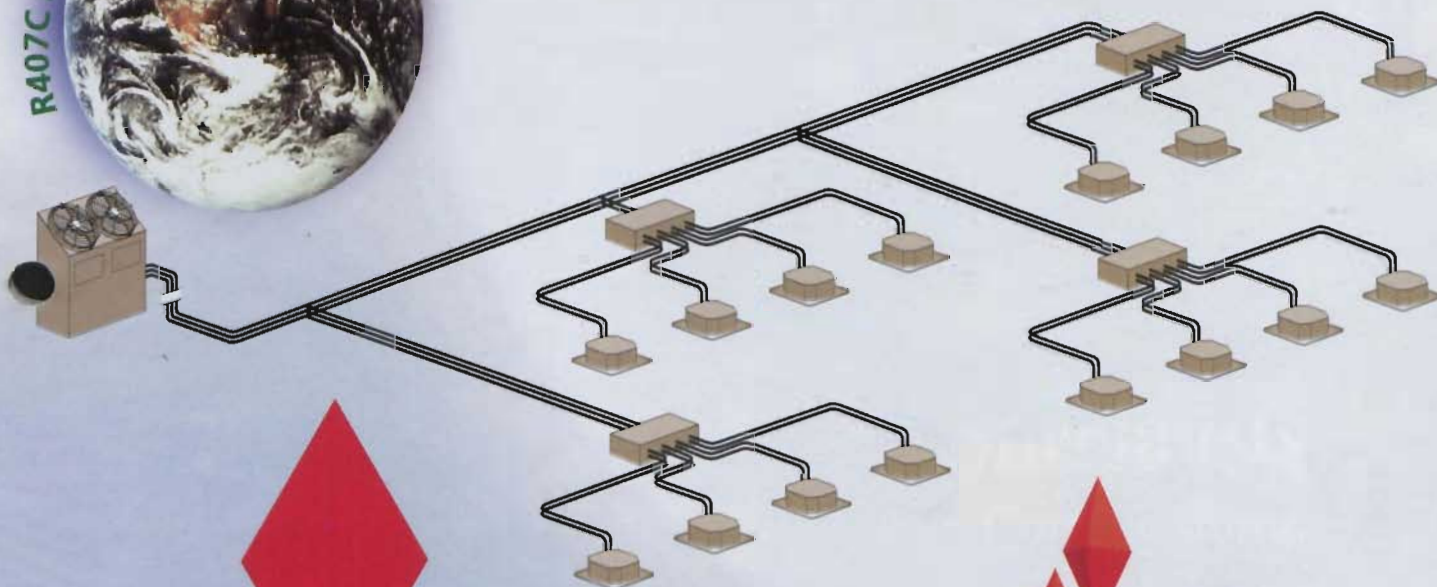
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Tel: 01 450 9433

MINIMISING LEAK DAMAGE

Andel Leak Detection and Alarm Systems

"Leaks are common and, if allowed to continue unchecked, can cause extensive damage, disruption and loss" says Bob Gilbert of Manotherm Ltd, who has just introduced to Ireland the Andel range of leak detection and alarm systems. According to Bob, Andel's Floodline range of leak sensors and control systems suits all manner of applications, but are particularly suited to sensitive and critical areas.

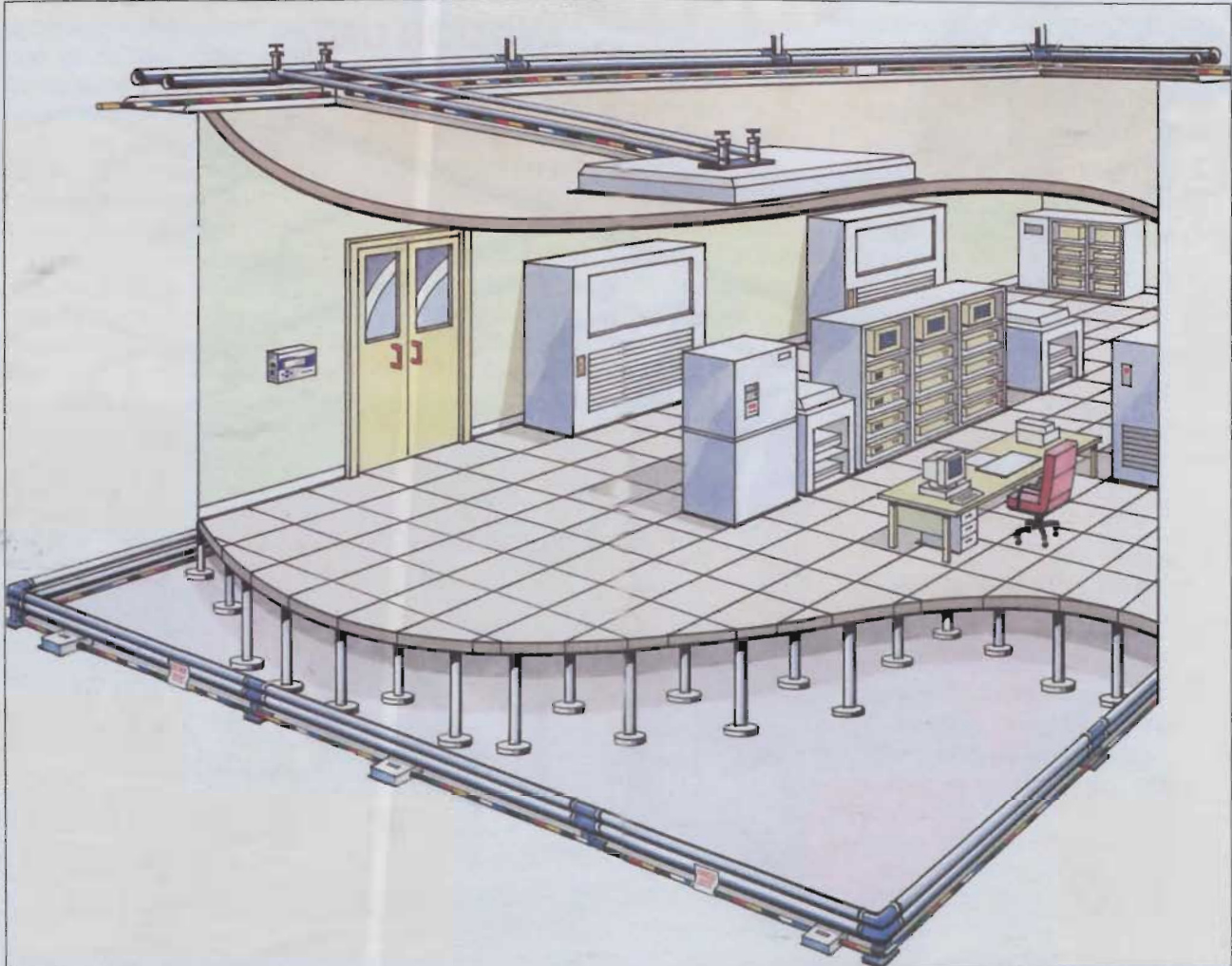
They are easy to install and maintain and incorporate water leak detection cable, different types of point sensors, and a

variety of single and multiple zone controls. The benefits of a zoned system mean:

- Each zone is separate, an alarm in one having no affect on the rest of the system;
- Each zone is continuously monitored for either a leak or a system fault;
- It is possible to mix & match different types of sensors from zone to zone;
- The system is multi-zoning and can thus handle, display and report any number of simultaneous alarms;

- There is no minimum or maximum zone length or size;
- Separate outputs/comms can be provided for each zone;
- Important zones can have alarm prioritisation;
- There is better control of costs through a choice of zone sizes;
- The system is easy to service, repair and operate;
- It is extremely flexible and easy to customise to cater for current and future needs.

Contact: Bob Gilbert, Manotherm.
Tel: 452 2355; email: manotherm@eircom.net





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- ◆ Low Pressure Hot Water Unit Heaters -- UH Series -- Capacities -- 11kW - 70kW Standard
- ◆ Oil/Gas Fired Free-Standing Spaceheaters -- UHR-Series 25kW - 400kW
- ◆ Heat Recovery Equipment -- WTW Series, Air to Air Aluminium Plate Heat Exchangers
- ◆ Custom Built Air Handling Units -- 250m³/hr - 50,000 m³/hr -- Control Packages Available

All enquiries to:



Tony Harmon Services Ltd.

SPECIALISTS IN AIR CONDITIONING & PREVENTATIVE MAINTENANCE



Tony Harmon,
Managing Director

Tony Harmon Services Ltd has developed the business over the years to suit the wide-ranging needs of our extensive customer base. Our objective is to understand our customers' requirements to identify and execute the most appropriate and cost-effective solutions.

The nature of the service we provide is very much personalised and directly related to the ever-changing face of the building services industry. As we continue to grow, we still remain totally dedicated to providing a quality, value-for-money, individually-tailored service.

Initially, Tony Harmon Services Ltd concentrated on service and maintenance. However, recent years have seen us expand into product supply and project management. In effect, there are now two distinct divisions to the business, though obviously they are very much inter-dependent and inter-related.

To date we have enjoyed considerable success and have an excellent team ethic with all personnel totally committed to serving the customers' needs.

Our success has been due to dedicated relationships and for that we thank our customers and suppliers. Together we have established a genuine trading partnership whereby we all work in unison towards the one single objective, namely client satisfaction.

We will continue to deliver to the exacting standards already set, and will endeavour to devise ever-more inventive solutions to meet the ongoing and anticipated future requirements of our clients.



Marie Keely,
Director, Financial

MITSUBISHI ELECTRIC QUALITY

City Multi is expanding



For medium to large applications such as office blocks, hotels, and large retail stores, City Multi - Variable Refrigerant Flow (VRF) multi-split systems - offer significant advantages over centralised plant systems.

City Multi R2: energy-efficient, simultaneous cooling and heating.

At certain times of the year, many buildings can require cooling in some areas and heating in others. The outstanding City Multi R2 system meets this requirement by redistributing sur-

plus heat from cooling operations to rooms where heat is needed, resulting in energy savings of up to 20% over conventional systems.

Ozone friendly.

The City Multi range has been re-engineered to use R407C ozone-friendly refrigerant - without performance loss, making it the world's most advanced VRF air conditioning range.

Easy to install, with

minimal disruption.

Both City Multi R2 and Y systems utilise 2-pipe technology throughout - compared to many VRF systems, which use the more conventional 3 pipe layout. This reduces installation time and associated costs, as well as reducing disruption during installation.

Versatile and space-efficient.

Unlike centralised plant systems, City Multi does not require plant rooms or bulky service shafts, making valuable space available for other purposes. A

wide choice of interchangeable indoor units is available for wall mounted, floor standing or ceiling installation.

Energy-saving features.

In addition to the highly efficient heat recovery operation of the City Multi R2 system, both this and the City Multi Y system feature energy-saving, 100% inverter driven outdoor compressor units with very low start currents.

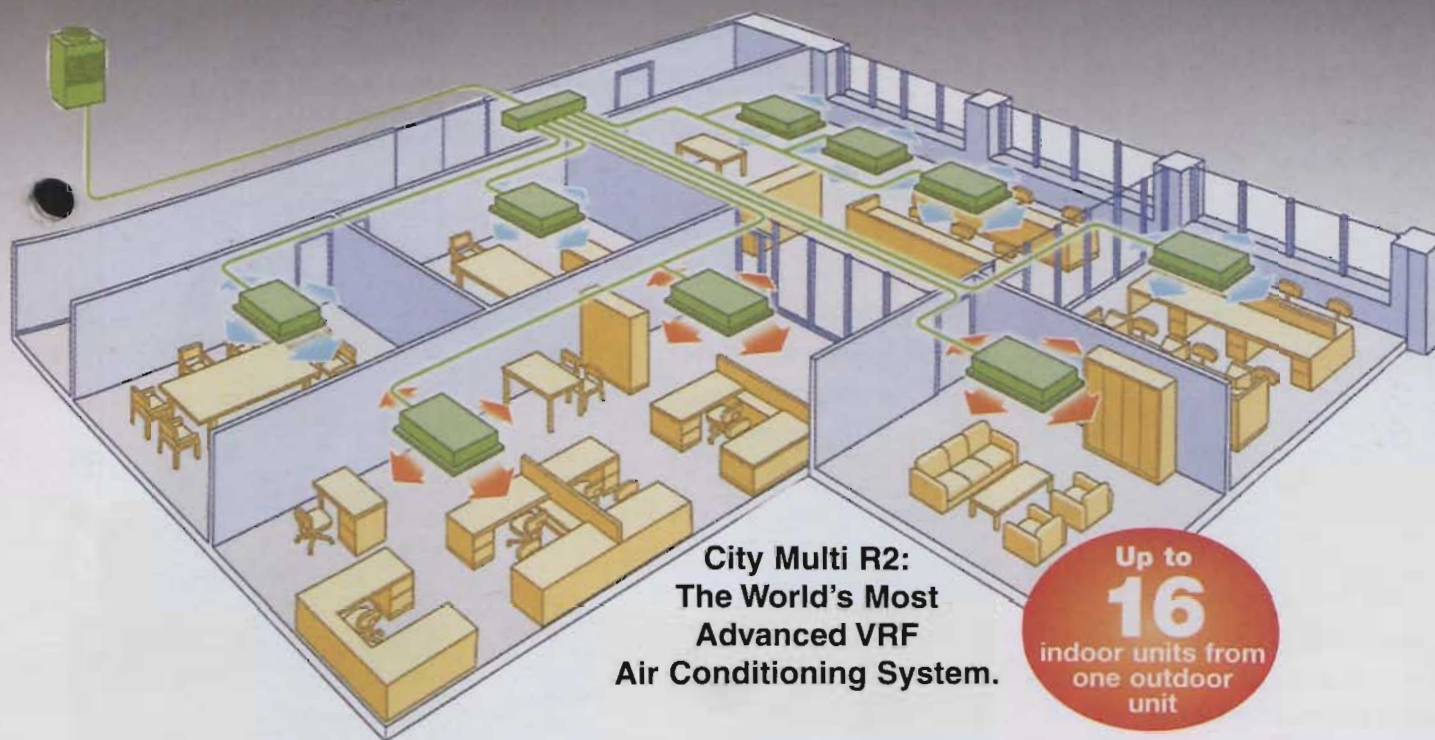
Control options to suit every kind of application.

City Multi systems offer an extremely wide choice of control solutions, from remote control of individual indoor units, to centralised systems, right up to full interface with industry standard Building Management Systems.

**For further information
on the
City Multi range
contact:
1800 333 600**



ending all the time.



**City Multi R2:
The World's Most
Advanced VRF
Air Conditioning System.**

**Up to
16**
indoor units from
one outdoor
unit

CITY MULTI

 **MITSUBISHI ELECTRIC**
AIR CONDITIONING SYSTEMS

THE QUALITY IS IN THE PEOPLE



Tony Harmon Services Ltd is synonymous throughout Ireland with high-quality plant maintenance, air conditioning and heating services.

Now celebrating 21 years in business, Tony was instrumental in introducing large-scale air conditioning and refrigeration technology to this country, and is now recognised as one of the foremost experts in the industry.

The fact that Tony trades as Tony Harmon Services Ltd underscores the key strengths of the service provided. It is in fact a major player in the air conditioning industry, employing fully-qualified engineers, professionals, technical sales and support personnel, and administrative staff.

Established initially as a service and maintenance company, Tony Harmon Services Ltd has evolved steadily over the years to the point where it now has two distinct divisions — Service & Maintenance, Product & Equipment supply. Obviously, there is a considerable amount of cross-over between both. The complementary strengths of each are harnessed where

requirements.

Technical Service Manager Michael Byrne heads up the Service & Maintenance Division. He has been with the company since its formation and is widely known and respected throughout the country. He is much sought after for his technical expertise, especially when it comes to trouble-shooting. Michael's Division deals primarily in preventative maintenance and modifications to all mechanical, electrical, heating and air conditioning equipment in commercial and industrial applications.

The engineers employed are highly-qualified and experienced, their combined skills — coupled with the company's ongoing education programme — ensure that all makes of equipment contained throughout the building services plant can be dealt with efficiently. They are also extremely versatile. While the company operates to carefully-devised management and operational procedures, nothing is set in stone. Common sense and flexibility come into play where a situation does not conform to the norm.



Michael Byrne,
Technical Service Manager



**Matt Baillie, Technical Sales with
Ashleigh Myles and Rita Cautley,**
Administration



Pat Murtagh,
Sales Manager

On the equipment supply side Pat Murtagh, Technical Sales Manager, joined the company three years ago. Pat, with several years of experience in air conditioning systems, has proved to be an invaluable asset to the company. With his expertise he has promoted and further developed this side of the business. He has designed and installed several major air conditioning systems to the highest technical standards with proven results. Pat's initiative and drive has resulted in tremendous growth in this division, making it necessary to employ an additional air conditioning engineer, Matt Baillie.

Both Pat and Matt are available at all times to provide full technical support in all areas of air conditioning systems. They work very closely with contractors and clients, first identifying what the requirements are, and then devising a tailor-made solution to satisfy that need. Appropriate assistance is provided with design and product selection, along with full project management right through to installation and commissioning. Thereafter, a full care and maintenance package is provided.



The award-winning Fillies Bar, Leopardstown Racecourse, Co Dublin.

Additionally, Tony Harmon Services Ltd are main agents for Mitsubishi Electric air conditioning systems and Thermo Air gas-fired packaged air handling units.

The inclusion of an extensive product portfolio from market-leading brands has considerably strengthened the total package provided to clients, making for a far more comprehensive and cost-effective range of services.

In celebrating 21 years in business, Tony Harmon Services Ltd is very firmly focussed on the growth and development of the company. The

infrastructure to achieve that objective is securely in place; the personnel to implement it are in place; and the will and determination is such that the entire staff is fully supportive of the initiative.



Above: Dublin Bus Headquarters, O'Connell St, Dublin.

Left: The Icon Centre, Leopardstown, Co Dublin.

Always at Your ...

Service

Tony Harmon Services provides a 2-hour call-out service within the Dublin area and a 24-hour standby service, 365 days of the year. Engineers are in constant contact with the office, while clients can contact the engineers directly on their mobile phones. This makes for an immediate response to any service requirement.

Tony Harmon Services used Mitsubishi Electric City Multi for the Eircom project in O'Connell Street, Dublin.



Maintenance

Typical plant items include:—

- AHU plant profiles
- Air conditioning systems
- Heating and ventilation systems
- Plant and grill balancing
- General electrical services
- Electrical control systems & panels

AIB, Blanchardstown



Tony Harmon Services Ltd.

1 Watergate, Old Bawn Road, Tallaght, Dublin 24.

Tel: 01-459 9688/451 3848/452 1497 Fax: 01-452 7696

Emergency (Mobile): 087-413 9406/086-259 1005/086-256 4289

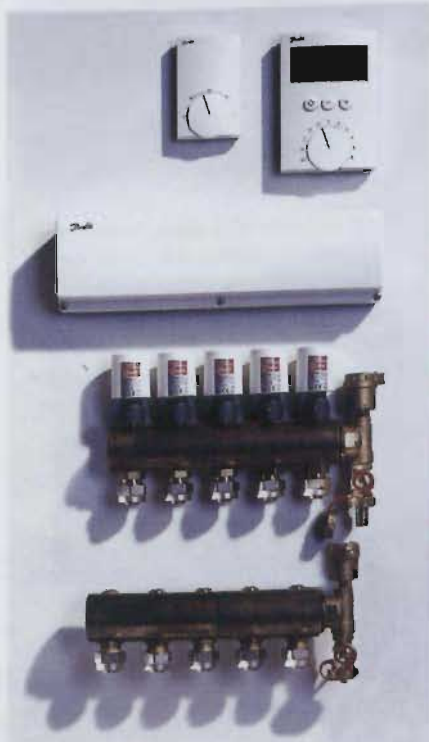
Email: tharmon@iol.ie

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“Wire Free” Control System for Under-Floor Heating



Using the Danfoss CFM Master Controller, the ABN-NC Thermal Motors modulate and control the flow through the manifold based on the CFR radio frequency Room Thermostat.

- Controls up to 12 circuits at any one time.
- Simple to install & control
- Change-over switch for night setback operation.
- Built-in battery back-up system in the event of power failure.
- “Wire free” Room Thermostat control is aesthetically pleasing, user friendly, simple to operate and an ideal control solution for heating applications (i.e. offices, domestic home/apartment, guesthouses, schools, nursing homes, etc).

Danfoss Ireland Ltd

Nangor Road Business Park, Dublin 12. Tel:
01 - 626 8111;
Fax: 01 - 626 9334
EMail: marketing@danfoss.ie

Polytherm Heating Systems

Polytherm Heating Systems Ltd, one of the leading underfloor heating specialists in Ireland today, was set up to cater for the ever increasing demand for underfloor heating. Polytherm is an associated company of Hevac Ltd, who has over 25 years experience in industrial, commercial and residential heating systems. The Polytherm System is based upon German technology and experiences over many years and has achieved every possible accreditation and standard for quality.

The basic principle of underfloor heating is very simple; it involves the circulation of warm water through Polytherm cross-linked polyethylene pipes with an oxygen barrier, which are installed under the floor in accordance with a pre-designed CAD layout to ensure maximum distribution of heat. Programmable thermostats for each room ensure that the temperature can be controlled to suit your needs, in every room of the house or building.

The increasing popularity of underfloor heating can be explained by many factors, such as economic, aesthetic and health related advantages over other forms of heating. Because heat is distributed evenly over the height of the room, there is no excessive heat in either the head or foot area, ensuring perfect comfort at all times.

Furthermore, Polytherm under floor heating can be used in conjunction with any conventional

type of floor covering, from carpet or parquet to marble or tiles.

Due to its low temperature demands, which require a lower temperature for the water being heated, Polytherm is ideal for low energy buildings. In keeping with Polytherm's environmentally conscious approach, it uses CFC-free system panels, making Polytherm the ideal choice for environmentally sensitive building projects.

Besides, a room heated with Polytherm feels as comfortable at 20°C as one heated with conventional methods at 22°C. There are considerable economic savings to be made as 1° of room temperature can mean a difference of up to 10% in heating costs.

Polytherm is beneficial for health reasons as well as the nature of the system means that the floor is kept free of moisture, making it an inhospitable breeding ground for fungi, bacteria and household mites.

Those suffering from asthma or allergies can also rest easier with Polytherm as it prevents dust being swirled around, making it a more comfortable environment for asthmatics or those with breathing difficulties. From an aesthetic viewpoint, Polytherm allows designers or architects free rein, as there are no radiators or wallmounted obstructions to get in the way of the optimum use of available space. All complete Polytherm heating systems and components come under a ten year guarantee, backed

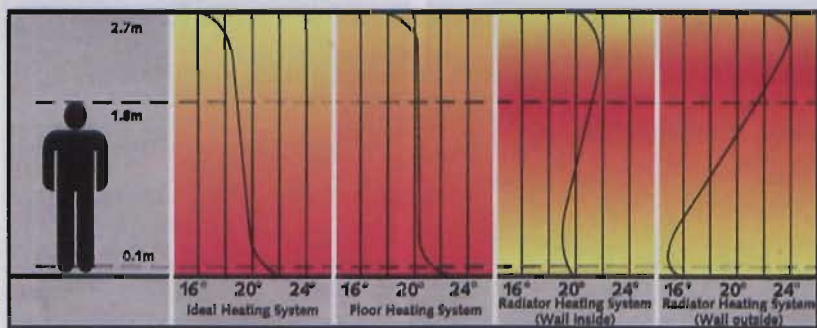


The great advantage of the Polytherm floor heating system is the simple time-saving installation with the system components of edge insulation strip, panels and PE - Xc pipe. Not more than three working steps are required and the Polytherm floor-heating system is all set and ready for screed laying.

by the Polytherm reputation for quality. Polytherm has designed and supplied under floor heating systems for nursing homes, schools, hotels, office blocks and many types of residential dwellings. So in terms of comfort, convenience, health and economics, Polytherm is a natural choice.

Contact: Declan Kissan, Polytherm
Tel: 01-419 1990;
Fax: 01-458 4808.

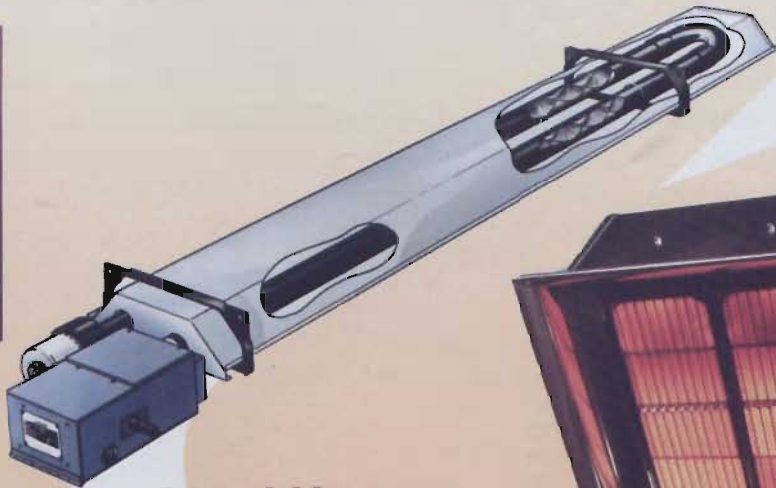
Email: info@havoc.ie;
website: www.polytherm.de





et al.: BS News

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Email: sales@rvr.ie



**P.S. All our products include a 12 month on site warranty
and are supported by our dedicated Customer Care Department.**

Wirsbo-Pex Pipes ... Ideal for Underfloor Heating

Wirsbo, one of the world's leading manufacturers of underfloor heating and plumbing solutions, has been represented in Ireland by Valve Control Systems Ltd (VCS) for the past 10 years. Throughout that time it has captured a significant market share but now, with underfloor heating being specified with far greater frequency, sales of Wirsbo-PEX pipes are expected to increase considerably, according to Bob Daly of VCS.

Wirsbo-PEX is manufactured from HD-polyethylene, a plastic raw material of high molecular weight. By using the cross-linking agent peroxide, together with high temperature and pressure, chemical bonds — so called cross-links — are formed between the long molecular chains of the polyethylene to create a 3-dimensional network. This makes the pipe ideal for conveying fluids across a wide range of temperatures and pressures. It also makes it incredibly strong, yet flexible, resistant to impact and abrasion, and easy to cut.

The pipes can be installed in screeded floors, under floorboards, and even in stud panelling.

Once pressure testing of the system had been completed, a 65mm thick screed is poured to provide a smooth, even surface for a final floor finish.

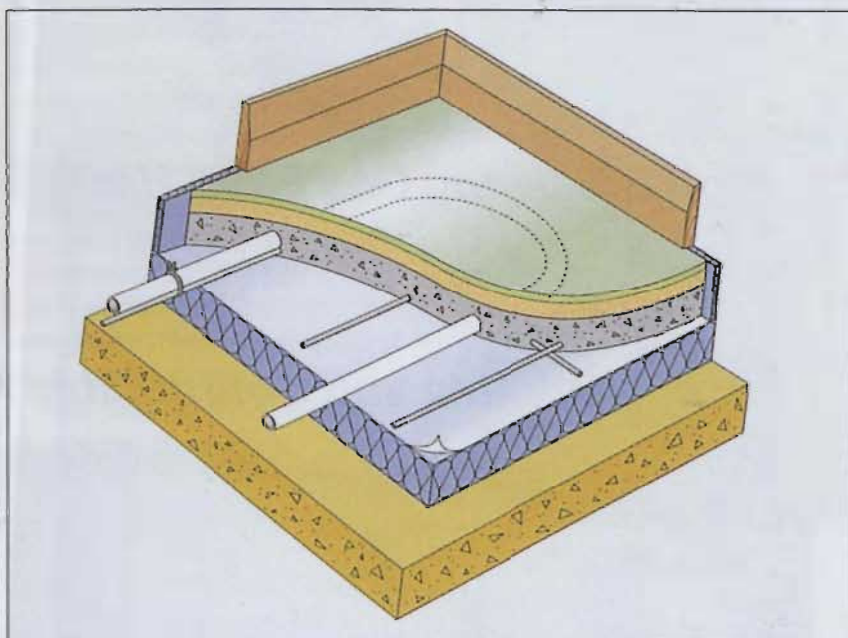
When the system is in

operation, warm water flowing through the pipework loops turns the entire floor into a radiant plane. Spreading the heating effect across the entire floor area also ensures that there are no hot or cold spots, and no draughts.

Since only comparatively low temperatures are required to

The flexibility, performance and reliability of underfloor heating has not only been increasingly chosen for new domestic projects, but also by the industrial, commercial and medical sector. There are now many successful installations in office buildings, schools, churches, housing for the elderly, to name but a few.

Wirsbo has also increased its market share in heating and plumbing installation by providing a flexible solution to



Wirsbo pipe does not require the use of any special screed additives. The maximum heat output from a solid floor with a room temperature of 20°C and a floor temperature of 29°C is approximately 100W/m of floor area.

achieve full comfort effect, the system also provides a safe environment.

The versatility of the underfloor heating product is that pipes may be laid in a minimum of 65mm screed. In suspended floors the pipe is laid on 300mm or 400mm aluminium diffusion plates between joints, or cross-battened on the joists.

hot and cold water services by means of a pipe-in-pipe system.

Redipex pipe-in-pipe is available with manifolds brackets and fittings to achieve a quick and easy method of installation, with many savings to the heating contractor and client.

Contact: Bob Daly, Valve Control Systems.

Tel: 01 - 828 8081;

Fax: 01 - 825 8077.



- **No Radiators, More Space**
- **Clean, Healthy Living**
- **Greater Energy Efficiency**
- **Silent Running**
- **No Cold Spots**
- **Dust-Free Environment**
- **10-Year Guarantee**

'Wire Free' Control System for Underfloor Heating

Water-borne floor heating is being used more and more, especially in newly-built homes, offices, hotels and public buildings.

There are several obvious reasons why this is so. Compared to radiators, floor heating gives the following advantages:

more flexible furniture arrangements;

– No drafts and less dust

Floor heating is distributed and controlled either locally or through a centrally-placed manifold and control unit. Previously there was a considerable disadvantage, in that wires had to be installed between all room thermostats and the control unit.

With the new Danfoss system of floor heat control, installation is just as reliable but much simpler. Instead of cables, communication is by radio waves. This also means that the room thermostats can be placed almost anywhere; installation is not just easier, it is less expensive. It also means that the installer can set up advanced floor heating controls without the preconditions associated with conventional systems.

The individual components are housed in enclosures of modern and discreet design that blend into most surroundings.

The system has been approved by the telecommunication authorities and causes no interference with other radio-controlled equipment, and because each room thermostat has its own unique ID code, the new system from Danfoss cannot receive messages from other equipment, irrespective of the transmitting frequencies they use.

Contact: David Holmes, Product Manager or Robert Fitzpatrick, Sales Engineer, Danfoss Ireland.

Tel: 01-626 8111; Fax: 01-626 9334; E-mail: marketing@danfoss.ie



Using the Danfoss CFM Master Controller, the ABN-NC Thermal Motors modulate and control the flow through the manifold based on the CFR radio frequency Room Thermostat

- Ideal distribution to heat throughout the room;
- The temperature can be reduced to 1-2° because the feet are warmer;
- The absence of radiators means

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Floor Heating Systems



Drinking Water Piping



Radiator Piping Systems

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V.C.S.

Valve Control Systems Ltd.

Unit D5, Dunshaughlin Business Centre, Dunshaughlin, Co Meath.

Tel: 01-825 8081 / 825 8082

Fax: 01-825 8077

eMail: vcs@indigo.ie

Web site: www.wirsbo.co.uk

Training & Career Development is the title of a new BSNews series aimed at assisting those who want to upgrade their qualifications and knowledge but don't know how to go about it. It will be presented in conjunction with the DIT, Bolton Street, with Seamus Murran — DIT's Head of Department of Construction Skills — providing the relevant information. We have already received quite a number of questions but invite anyone who has a query vis a vis training or career development to send a brief note to BSNews, Carraig Court, George's Avenue, Blackrock, Co Dublin.

Ask the Expert



Seamus Murran, Head
Department of Construction
Skills, DIT Bolton Street

I have worked as a plumber for 20 years but have no formal qualifications. What can I do to get some?

This is a difficult area to offer advice on as there are many unknown aspects to the question. If you can furnish written proof of when you started and finished your apprenticeship — and a number of other important items — you can apply to FAS in Baggot Street, Dublin 4, for a National Craft Certificate in Plumbing.

If you wish to take a course to get the formal qualifications, contact the Plumbing/Refrigeration Section, Construction Skills Department, DIT Bolton Street, Dublin 1.

National Craft Certificate (NCC)

The National Craft Certificate is currently awarded jointly by the Department of Education and Science and FAS. It attests to the successful completion of the apprenticeship programme and increasingly is becoming a required qualification for Irish craftpersons who wish to find work at home or in other countries.

It is likely to become an essential requirement for working as a craftperson in the future.

Requirements for the award of NCC

To qualify for the award of a National Craft Certificate (NCC) applicants must provide proof that they have:

- been registered with FAS (formerly AnCO)
- served the full period of apprenticeship
- completed the first year "off-the-job" training course (may be waived in certain circumstances)
- attended the full educational release programme
- achieved a pass grade in the following:-
 - First year assessment programme and terminal test (may be waived in certain circumstances)
 - Department of Education and Science Junior Trade Written Examination
 - Department of Education and Science Senior Trade Certificate or
 - Have successfully completed all phases of the New Apprenticeship Scheme for those who are registered accordingly

For the old 'time served' apprenticeship, an apprentice must provide

proof as listed above and then "apply" for the NCC. With the standards-based apprenticeship, an apprentice who successfully passes all phases (7) will be awarded the NCC automatically and does not, therefore, need to apply

* * * * *

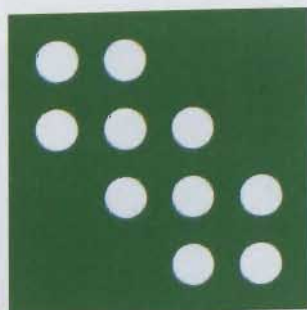
I run a successful, medium-sized, merchants' outlet. I have two excellent assistants in their mid-twenties and want to upgrade their knowledge in refrigeration. How do I go about it?

The Construction Skills Department of DIT offers a night course in Advanced Refrigeration for students. The course includes refrigeration and air conditioning technology, industrial and commercial refrigeration, etc.

The course runs from September to May of each year and is held on Wednesday night from 7pm to 10pm. Students who successfully pass the final assessment are awarded a DIT Continuing Professional Development Certificate.



All our tubes are up to the Mark



**IRISH METAL
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Irish Metal Industries supply a complete range of copper tube for hot and cold water installations, gas services, sanitation, central heating and numerous other building and engineering applications.

All our tubes are manufactured to the stringent requirements of EN : 1057 and we are licensed to engrave them with the coveted Irish Standard Mark which is the registered mark of the National Standards Authority in Ireland. What's more we give a unique **25 year guarantee** against manufacturing defect. So what ever your requirements you'll receive nothing but the best quality, service and reliability with copper tube from Irish Metal Industries.

Service Line: For orders and further information.

Telephone: (01) 295 2344/295 2137.

Fax: (01) 295 2163

Irish Metal Industries Ltd, 25 Spruce Avenue,
Stillorgan Industrial Park, Blackrock, Co Dublin.

IMI
A subsidiary of IMI plc.

BTU GOLF NEWS

Kennedy Wins at Royal Dublin

Sponsor: Danfoss Ireland: John Sampson

Winner: Michael Kennedy (8), 44pts

Class 1

First: Des Prendergast (8), 39pts

Second: John Sampson (11), 38pts

Third: John Lavelle (8), 34pts

Class 2

First: George Carlton (14), 38pts

Second: Dave Cranston (13) 38pts

Third: John White (14), 35pts

Class 3

First: David Daly (24), 38pts

Second: Gerry Tobin (16) 36pts

Third: Declan O'Donnell (16), 36pts

Visitors

Brian Sterling (18), 33pts

Front Nine

Brian Keaveny 20pts

Back Nine

Graham Fay 20pts

Christmas Outing

St. Anne's; Friday 7 Dec. 2001

AGM:

Monday, 4 February 2002, Bellamy's Ballsbridge Dublin 4.

Time: 8pm



BTU Captain Brendan Keaveny with John Sampson, Danfoss (Irl), sponsors and Class 1 winner Des Prendergast.



BTU Captain Brendan Keaveny with John Sampson, Danfoss (Irl), sponsors and Class 2 winner George Carlton.



The final of the Euro Fluids sponsored BTU Match Play was played in Woodbrook recently with Brian Redmond and Michael O'Doherty Jnr going head to head. Michael emerged the eventual winner and is seen here receiving his trophy from BTU vice-captain Des Prendergast.



Class 3 winner David Daly with BTU Captain Brendan Keaveny and John Sampson, Danfoss (Irl), sponsors.



BTU Captain Brendan Keaveny with John Sampson, Danfoss (Irl), sponsors and overall winner Michael Kennedy.



BTU Captain Brendan Keaveny with John Sampson, Danfoss (Irl), sponsors, and John Lavelle, third, Class 1.

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DELIVERING PACKAGED BUILDING SERVICES SOLUTIONS

- ✕ Packaged building services plant rooms.
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Packaged boilerhouse unit being delivered to Burgh Quay.

Euro Gas Pak Plant can provide a total building services solution for your building. As well as offering various packaged solutions such as Switch rooms, Fire Sprinkler plant rooms, Central Heating plant rooms. We can also offer packaged rooftop HVAC units. These units come with gas and/or electric heating as well as DX or chilled water cooling.

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eMail: sales@eurogas.ie Website: www.eurogas.ie

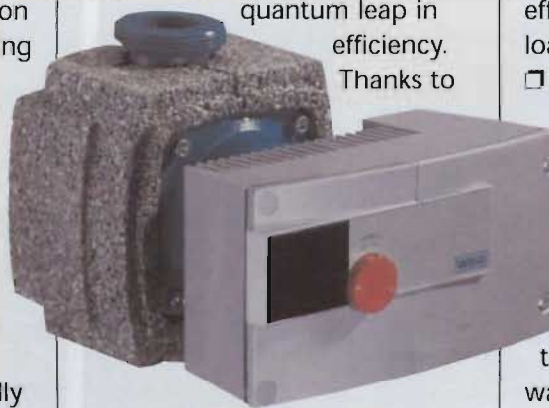
New Wilo Stratos High-efficiency Pumps

Around 70 to 90 million heating pumps are in use throughout Europe.

Although they are not frequently considered to be high energy consumers, the sheer magnitude of their use does in fact result in colossal electricity consumption. They account for 35 to 50 billion Kw/Hr every year – corresponding to around one percent of the annual primary energy requirement of a country the size of Germany.

The most common type of circulating pump installed today is the glandless pump design. These pumps have the advantage that they are maintenance-free and practically noiseless. However, this must be paid for with the lower efficiency of the glandless motor. This in turn has a direct influence on the primary energy cost – and thus also on the operating costs. If we take into account that apart from the high number of circulating pumps in a building, these units also have a very high operating duration (heating pumps up to around 6,000 operating hours per year), it is possible to see an

enormous savings potential which is dormant. This can now be realised with the next generation in pump technology. Wilo GmbH has developed the new Stratos range of pumps, which combine the advantages of glandless technology with a quantum leap in efficiency. Thanks to



new motor technology and an innovative wet space encapsulation, the Wilo-Stratos enables the energy demand to be reduced by up to 80% in comparison to standard glandless pumps. With this revolutionary technology, Wilo has delivered the world's first wet runner pump with ECM-technology for use in heating and cold water applications. ECM stands for Electronic

Commutated Motor (Motor with permanent magnet rotor). This motor design is used for the first time in Stratos pump drives and has the following advantages:

- ☐ Halving the power consumption P1
- ☐ Clearly improved motor efficiency at full load and part load operation
- ☐ Improved hydraulic efficiency
 - ☐ Reducing the annual energy consumption with the aid of electronic power adaptation by up to 80 percent
 - ☐ Reducing size and weight
 - ☐ Temperature range -10°C to +110°C for heating and cold water applications

The high efficiency both at part load and at the full load operation is especially a clear advantage, since heating pumps can run at part load range up to 98% of their total operating time.

Reduced lifecycle costs

Normally, products with higher efficiencies and thus lower energy consumption are more expensive to manufacture and this is reflected in a higher sales price to that of conventional products. Up to now, the extra costs due to the electronics have made market introduction difficult. However, the situation has clearly improved with the availability of compact converters and advances in the field of power electronics and microelectronics. The extra capital costs are now paid back within a short period of time thanks to the clearly-reduced operating cost afforded by the new EC-motor technology.

Development of the energy consumption of average heating circulating pumps





“Plastic has its uses. I use it all the time to buy copper.”



So What is Trane's Best Kept Secret?

Trane's name, over the years, has become synonymous with technical innovations and leadership in the field of chilled water generation. Liquid Chillers, ranging in capacities from 9kW through to 8000kW are installed Worldwide and Trane's position as a World-leader in this field is unquestionable. During the years of Global leadership, Trane has also offered a complete range of HVAC systems and solutions, yet because of the prominence of Trane's liquid Chillers, market recognition for their full product range is not as strong as it should be.

Over the coming months in BS

Trane's CCGA units are of modular, aluminium pentapost construction with double-skin panels. The units are suitable for air volumes up to 20 m³/sec.

The units are manufactured in our recently extended AHU manufacturing facility in Colchester, England. This modern facility also incorporates a coil manufacturing line, which is partly responsible for achieving remarkably short deliveries to site in Ireland. Training and customer test facilities are also available from Trane.

The competitive pricing of these units and the option of Factory

pressure of 2000Pa without any permanent deflection.

We have successfully completed Eurovent testing to achieve a leakage rate class B. The units can be supplied in stainless steel, pre-coated steel and galvanised steel. Any number of accessories can be fitted as standard including Dessicant wheels, evaporative humidifiers, plug fans, direct drive fans and explosion proof motors. Factory fitted controls again are an option, offering reduced labour time on site.

Trane ISM Custom Engineered Systems

By: Karl Conlon

For projects that require something special from an Air Handling Unit, Trane offers the ISM range of AHU's. Built in America, ISM units are the standard by which all other Air Handling units are judged. With over forty years experience in the high specification sector, Trane ISM Custom Engineered Systems have the capability to provide custom HVAC systems for the most demanding process applications. The ISM unit performance capabilities are as follows:

Temperature Control:
-25°C to +200°C.
Humidity Control:
3 grains to 95% RH.
System Pressures:
-12,500 Pa to 25,000 Pa.

Air Volumes:
Up to 150 m³/s.
Unit leakage:
Less than 0.5% @
150% design static pressure.

Trane's ISM range offers an unlimited choice of components, materials and unit configurations, so now you know our best-kept secret, call us to learn more.

Trane Ireland Limited,
8 The Mall, Lucan, County Dublin.
Tel: 01 628 2965
Fax: 01 628 2266

News, Trane want to introduce you to another one of their World leading products, an extensive range of Air Handling Units. In this first article, the team of Commercial Sales Engineers for Trane Ireland Limited, talks about the three main product types in Trane's Air Handling Unit range, so read on, and learn more about Trane's "best kept secret"...

Trane CCGA Climate Changer Systems

By: Conleth Ryan

Designed to cater for most standard applications, the CCGA range of Air Handling Units offers competitively priced equipment on short delivery cycles.

Engineered Controls makes them ideally suited to commercial type applications.

Trane CCEA High Specification Systems

By: Andy Green

The Trane CCEA units are built to cater for the rigours of a more demanding environment such as Pharmaceutical applications, Hospitals and Petro-Chemical sites.

The units have a frame-less construction, which means that they are suitable for Clean Room applications. The integral strength of the unit is characterised by the density of the Rockwool construction (70kg/m³). The units are rated to a



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For noisy machines, ducts, pipes and fans



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For further information on site surveys, detailed reports or manufacturing contact:

Paula Lonergan at Tel: 01 - 667 1077; Fax: 01 - 667 1055

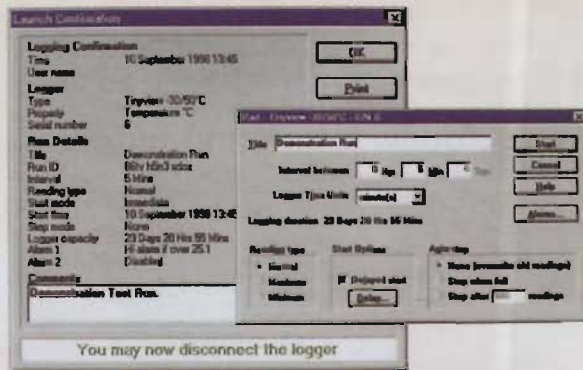
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TINYTAG TRANSIT



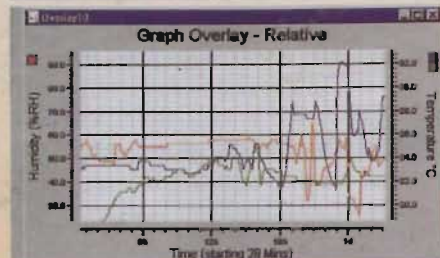
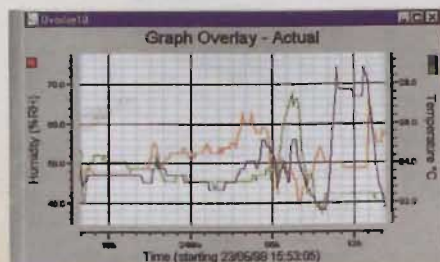
AUTOMATIC TEMPERATURE LOGGING AT AN INCREDIBLE LOW PRICE!

Designed to meet the stringent high standards of temperature monitoring in the food transportation field, this little stand-alone battery-operated temperature logger is the perfect solution in most applications which range between -30 to +50°C. Capable of recording approximately 1800 readings with a 1 sec. to 10-day interval, and combining the flexibility of a push button or delayed start, you'll be amazed at how little it costs.



The software and cable that are included will allow the recorded information to be downloaded and presented in numerical or graph format. Data can also be transferred to other windows applications for presentation with reports.

Since additional loggers can be purchased at a reduced cost due to no further software being required, businesses needing multiple locations monitored will benefit even further from the TINYTAGTRANSIT's low cost.



- 1800 readings approx.
- Two programmable alarms
- 1 second to 10-day logging interval
- Timed and push-button start available
- Offload data when stopped or when at 1-minute logging intervals
- Battery life up to two years
- Min/Max/Actual readings
- Memory size 2k (non volatile)
- Three stop options
- Software and cable included

For further information or a demonstration contact:

Manotherm Limited

THE CONTROL CENTRE

4 Walkinstown Road, Dublin 12.

Tel: 01 - 452 2355; Fax: 01 - 451 6919

email: manotherm@eircom.net